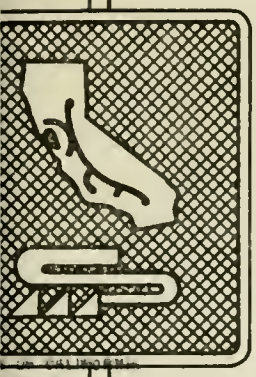

State of California

THE RESOURCES AGENCY

Department of Water Resources

BULLETIN No. 119–23

FEASIBILITY OF SERVING BUTTE COUNTY FROM THE STATE WATER PROJECT

APRIL 1966

HUGO FISHER
Administrator
The Resources Agency

EDMUND G. BROWN
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FOREWORD

In November 1960, the California Water Resources Development Bond Act was approved by the State's electorate, paving the way for the construction of the State Water Project. Since that time, many local water service agencies throughout the State have applied to the Department of Water Resources for consideration as potential contractors with the State for water service from the proposed facilities. Several water agencies have been organized since November 1960 expressly for the purpose of obtaining supplemental water supplies from the State facilities for the areas they represent.

Prior to executing contracts for a water supply with public agencies, the Department of Water Resources made studies of those agencies and the areas encompassed by them to determine the propriety of entering into such contracts. These studies were made with the goal of evaluating (1) each area's future demand for supplemental water supplies, (2) the legal ability of each agency in question to enter into a water supply contract with the State, (3) the engineering feasibility of providing the proposed water service, and (4) the financial ability of each agency and its constituent area to bear the financial burden necessarily imposed upon it by a water supply contract with the State.

The results of the studies made of each agency, as described above, along with supporting material, have been embodied in separate reports and have, or will be, published by the Department of Water Resources for the benefit of interested agencies and persons. This bulletin, dealing with the County of Butte, is one of a series of such publications.

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THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

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HUGO FISHER, Administrator, The Resources Agency
WILLIAM E. WARNE, Director, Department of Water Resources
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CALIFORNIA WATER COMMISSION

RALPH M. BRODY, Chairman, Fresno

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MARION R. WALKER, Ventura

- - - - 0 - - - -

WILLIAM M. CARAH
Executive Secretary

ORVILLE L. ABBOTT
Engineer

ACKNOWLEDGMENT

The cooperation of the officials of Butte County is gratefully acknowledged. Special mention is made of the members of the Board of Supervisors, County of Butte.

Mr. Leslie J. Pryde, Chairman, District 4, Gridley[1/]

Mr. Jack J. McKillop, District 1, Oroville

Mr. Arley L. Howsden, District 2, Chico[2/]

Mr. Donald Maxon, District 5, Paradise[3/]

Mr. Floyd F. Giles, District 3, Chico[4/]

The help of Mr. George Stamm, County Water Resources Engineer and Mr. George C. Kading, County Counsel, is also acknowledged.

1/ Mr. Pryde was elected as Chairman for 1965.
2/ Mr. Alldredge died on January 19, 1965, and was succeeded by Mr. Arley L. Howsden on March 17, 1965.
3/ Mr. Steinegger was Chairman at the time the contract was signed. He was replaced by Mr. Donald Maxon in January 1964.
4/ Mr. Giles was elected as Chairman for 1966.

ABSTRACT

Bulletin No. 119-23, FEASIBILITY OF SERVING BUTTE COUNTY FROM THE STATE WATER PROJECT, April 1966

On December 26, 1963, Butte County became the first agency in the Feather River service area to contract for water from the State Water Project. Butte County, in 1960, had a population of 82,000. By 2020 this will have increased to 257,000./ The County's economy, which now rests largely upon an agricultural base, is expected to evolve into one with greater emphasis on recreation and industry. Urban and suburban areas will gradually spread and take over land now used for agriculture./ The Delta Water Charge (to local agencies in Butte County) will rise from $3.50 per acre-foot in 1968 to an estimated $7.49 in 1970./ The histories of bonded indebtedness, ad valorem taxes, and assessed valuations, coupled with expected increases in population and industry, support the feasibility of providing water to certain areas within Butte County.

CHAPTER I. INTRODUCTION

On December 26, 1963, Butte County became the first agency in the Feather River service area to contract for water from the State Water Project. The execution of this contract climaxed six months of negotiations between the County, acting through the Board of Supervisors, and the Department of Water Resources. The County is the contracting entity and will wholesale water to existing or new water supply agencies.

This contract is supported by studies of the water requirements and the existing water supplies of the County to determine future supplemental water needs. The most recent report entitled "Water Requirements and Sources of Supply, Butte County, California", was performed by Leeds, Hill and Jewett, Inc., Consulting Engineers. This report, presented to the Board of Supervisors on November 19, 1963, recommended that the County contract for 20,000 acre-feet of water for future municipal and industrial needs, plus any additional water requested by local water supply agencies.

Purpose and Scope of the Report

This report presents the information and data used to evaluate the feasibility of providing a water supply from the State Water Project to Butte County. The water supply contract with the County calls for delivery of project water starting in 1968 with a delivery of 300 acre-feet, increasing to a maximum annual entitlement of 27,500 acre-feet in 1990.

A memorandum office report, prepared prior to the execution of the contract, provided the factual information necessary to justify a contract of this type. This report expands and formalizes that information in accordance with the Department's policy for the 119-series bulletins.

Geography

Butte County, shown on Plate 1, "Location Map", contains both valley floor and mountain regions. The valley floor occupies the southwestern portion, ascending to foothills to the north and east. Beyond the foothills, the Sierra Nevada cuts across the County along a northwest-southeast axis. A branching stream pattern, perpendicular to the axis of the Sierra Nevada, forms the North, Middle, and South Forks of the Feather River. These streams merge above Oroville, near the site of Oroville Dam, now under construction.

On the valley floor, hot dry summers and wet mild winters are the rule. In the valley, the average annual rainfall is about 25 inches and the average annual frost-free period is about 260 days. Killing frosts rarely occur during the growing season.

History of the County

Butte County was one of California's original 27 General Law counties established by the Act of 1850. At the time of its creation, the County boundary reached from its present western boundary to the eastern edge of California. Portions of the County were later used to enlarge or create the surrounding counties of Lassen, Tehama, Plumas, Colusa, and Sutter.

As early as 1820, trappers, hunters, and prospectors operated in the then thinly settled area. The discovery of gold in 1848 at Bidwell Bar on the Middle Fork of the Feather River, triggered an explosive rush of prospectors to the hills of the County. In a few years, however, the easy diggings disappeared and although the production of gold continued, it was obtained primarily through underground and hydraulic mining. This type of mining required a large capital investment and many small operators were forced to turn to agricultural pursuits. An agricultural economy gradually developed and today is the County's economic mainstay.

Taxing Powers and Ability to Contract with the State

Article 5, Chapter 7, Part 2, Division 2, Title 3 of the Government Code, authorizes Butte County to acquire, develop, distribute, and sell water to the inhabitants of the County. (Government Code Section 25690.) It also provides that a county may acquire, construct, and manage a water system and all other works necessary for supplying water for the use of the county and its inhabitants. (Government Code Section 25692.) Government Code Section 25696 authorizes the County Board of Supervisors to establish the rates to be charged for the use of water furnished by the County. The County has the power to tax for the purposes of acquiring, distributing, and selling water (Government Code Section 25694). However, such a tax is subject to approval by the voters (Government Code Section 25694). Under the provisions of Government Code Section 25697, a tax may be levied for the maintenance of a water system in the County. Such tax

is limited to a maximum of 15 cents per $100 of assessed valuation of all taxable property within the County unless specified otherwise by a majority of electors voting on a proposal for a higher rate.

Government Code Section 25693 authorizes the County to incur a bonded indebtedness in accordance with Article 1, Chapter 6, Division 3, Title 3 of the Government Code for the purposes of providing an adequate water supply for the County. The total bonded indebtedness of the County cannot exceed 5 percent of the taxable property of the County as shown by the last equalized assessment roll, unless water conservation, flood control, irrigation, reclamation, or drainage works, improvements, or other purposes, or the construction of primary county roads are included in any proposition submitted, in which case the total amount of bonded indebtedness may exceed 5 percent but shall not exceed 15 percent of the taxable property of the County as shown on the last equalized assessment roll. (Government Code Section 29909.) Bond maturity may not exceed 40 years (Government Code Section 29910.1).

Specific authority to contract with the State for a water supply is not expressly set forth in the Government Code provisions which express the powers of a county. However, under the provisions of the Water Code governing the Central Valley Project (Part 3, [Sections 11100 to 11925], Division 6 of the Water Code) the County is a State agency (Water Code Section 1102) and as such is authorized to enter into contracts with the Department for the purchase of water (Water Code Sections 11625 and 11661) and to comply with the terms, provisions, and conditions of any such contract (Water Code Sections

11662 and 11664). Water Code Section 11652 provides that the governing body of the State agency which contracts to purchase water from the Department shall whenever necessary levy a tax or assessment sufficient to provide for all payments under the contract then due or to become due within the current fiscal year.

CHAPTER II. HISTORICAL AND FUTURE ECONOMIC DEVELOPMENT

Population

The composition and population trends in Butte County are generally similar to those of other counties in the Sacramento and San Joaquin Valleys. There has been a gradual shift of the population in the County from rural to urban areas, with the larger cities of Oroville, Chico, Paradise, and Gridley showing nearly all of the increase. In 1950, approximately 14 percent of the total County population of 64,930 were classified as rural farm inhabitants. The 1960 census showed an increase in the total population to 82,030 and a decrease in the number classified as rural farm inhabitants.

The historical and projected population of Butte County and California are shown in Table 1.

TABLE 1

HISTORICAL AND PROJECTED POPULATION
OF BUTTE COUNTY AND CALIFORNIA
1940-2000

	Population in 1,000's						
	1940	1950	1960	1970	1980	1990	2000
Butte County	43	65	82	117	145	191	257
California	6,907	10,586	15,830	21,700	28,200	35,000	42,000

For the purpose of this report, the County population was broken into the two main classifications; urban inhabitants and rural inhabitants. Urban inhabitants were assumed to be comprised of that

portion of the total population which obtains all of its water from the distribution systems of local water service entities. The inhabitants of residential farms in the Oroville service area were included. Rural inhabitants on the other hand were considered to be comprised of that portion of the County population which would not require supplemental water from a water service entity. Included in this classification are inhabitants of small homesites in the rural areas deriving their water supply from private wells. The historical and projected urban and rural population of the County, by subareas, are tabulated in Table 2.

TABLE 2

PRESENT AND PROJECTED POPULATION
OF COUNTY BY SUBAREAS
1960-2000

	Population in 1,000's				
	1960	1970	1980	1990	2000
Oroville Area East of Feather River					
Urban	15.1	29.5	35.0	47.5	65.0
Rural	4.0	4.0	4.0	4.0	4.0
Total	19.1	33.5	39.0	51.5	69.0
Oroville Area West of Feather River					
Urban	5.3	12.0	17.5	22.5	32.5
Rural	1.5	1.5	1.5	1.5	1.5
Total	6.8	13.5	19.0	24.0	34.0
Chico Area					
Urban	33.8	43.5	54.5	77.0	110.0
Rural	3.0	3.0	3.0	3.0	3.0
Total	36.8	46.5	57.5	80.0	113.0
Paradise and Gridley Area					
Ruban	16.3	20.5	26.5	32.5	38.0
Rural	3.0	3.0	3.0	3.0	3.0
Total	19.3	23.5	29.5	35.5	41.0
Butte County					
Urban	70.5	105.5	133.5	179.5	245.5
Rural	11.5	11.5	11.5	11.5	11.5
Total	82.0	117.0	145.0	191.0	257.0

Agricultural Development

Although Butte County had its original impetus for growth and development through the mining industry, agricultural resources soon became the dominating factor. With the fertile, fine-textured valley soils and the loamy, well-drained foothill soils, both with ample water supplies, a vast agricultural complex has been formed.

Agriculture in the valley floor is well developed and highly diversified. The five predominant crops in the area, in their order of importance by acreages are rice, deciduous orchard, irrigated pasture, truck and miscellaneous field crops. A unique thermal belt in the foothill area immediately above Oroville provides a suitable climate for subtropical fruits including oranges and olives.

In 1964, there were approximately 50 different crops grown in the County with an aggregate value of $47,927,000 on a total of 543,399 acres. Table 3 gives a breakdown of the major groups of crops, their market values, and acreages.

TABLE 3

BUTTE COUNTY
CROP ACREAGES AND VALUES
1964

	Acreage	Market Value
Field crops (pasture, grain, rice, sugar beets, hay, seed)	504,900	$27,691,000
Fruit and Nut Crops, Nursery Stock	34,800	18,763,000
Vegetable crops	3,700	1,473,000
Total	543,400	$47,927,000

The total value of agricultural food and fiber produced in Butte County during 1964, including all the related agricultural products such as livestock, dairy, poultry, and apiary was about 56 million dollars.

Present Industrial Development

Mining

The history of mineral production in Butte County dates back to the discovery of gold in 1848 on a gravel bar of the Feather River. Over 71 million dollars in gold was produced in the County between 1880 and 1952 and several times that amount was produced between 1848 and 1880. At present gold mining has little effect on the economy of the County.

Sand and gravel and natural gas accounted for 99 percent of the County's 1964 mineral production of $4,633,000. Substantial mineral deposits in the County include limestone, lead, zinc, copper, chromium, and cadmium, but at current price and wage levels they cannot be profitably worked.

Forestry

The heavy precipitation on the higher water sheds is conducive to the growth of timber. This timber has contributed substantially to the economy of the County ever since the construction of the County's first saw mill in 1852. Approximately one-third of the County's area is presently classified as commercial forest land.

In 1945, the last year for which a timber inventory was available, 1.6 percent of the State's standing timber - 3,857,000,000

board feet - was in Butte County. Thirty-nine percent of the timber was located on Government owned property and national forests where cutting by private operators is carefully controlled. Cuttings on private timber lands, however, have been so heavy that at present there are only about 120 sections of timber land on the local tax roll.

Future Development of Economy

In the past, agriculture and its related activities have been the prime factor in the economic development of the County and adjoining counties. With the start of construction of the Oroville Division facilities, a key unit of the State Water Project, many new service and supply-type activities have been established to serve the rapidly growing population.

Extensive urban growth is anticipated around Chico, Oroville, and Paradise, particularly with the increased economic activity resulting from the construction and operation of Oroville Dam. Homes will become more dense between Oroville and Palermo and will undoubtedly expand in such valley towns as Gridley and Biggs. In the Sierra foothills, new water sources will probably change the present land use on the undulating lands into one of small farms, resorts, and retirement centers.

In recent years, recreation activity has increased rapidly to a position of major importance in the County's economy. The climate, terrain, and accessibility of the foothill portions of Butte County have already encouraged a great diversity of recreation development by public and private entities. The community of Paradise,

located at an elevation of 2,000 feet in the north central portion of the County, is a notable example of a rapidly expanding resort, summer home, and retirement center. Similar low-density rural communities will probably be duplicated many times in the future along the entire length of the Sierras, in some cases up to an elevation of 3,500 feet.

The Oroville Division facilities now under construction will provide a tremendous recreational resource. Plans are now in preparation to provide for all types of water associated recreation at the reservoir and regulating bays. Even the borrow areas supplying the embankment materials for the Oroville Dam will be used to enhance wildlife and fisheries.

Industrial Development

A report submitted to the County by Leeds, Hill and Jewett, Consulting Engineers, November 19, 1963, recommended that the County look forward to bringing in substantial industrial development with high water-using products or processes. The report stated that if large quantities of water were available at a reasonable price, it could provide the impetus required to establish an industrial complex in the County.

Butte County has recently embarked on an agressive and comprehensive program to encourage heavy industry to locate in the valley floor portion of the County. The first annual Industrial Exposition was held in Oroville in October 1965. The exposition was sponsored by the Oroville Area Chamber of Commerce and is evidence of the local interest in seeking industrial development.

For the purpose of determining industrial water requirements in this report, two areas were selected and assumed to represent the type of industrial development that will occur within the service area. These areas are shown on Plate 1 and are referred to as the Tri-City industrial area and the South Oroville industrial area.

Tri-City Industrial Area. The Tri-City industrial area is located at the junction of Highway 99E and the Oroville-Chico Highway. The basic factors of production, including large tracts of inexpensive land, natural resources, markets, power, and transportation, are readily accessible to the site. Labor requirements could be met from the three major urban areas of Chico, Oroville, and Paradise. Water could be supplied from either the State Water Project or the Pacific Gas and Electric Company's hydro-electric power system. The section on local water supplies in Chapter III will explain this point further.

South Oroville Industrial Area. The South Oroville industrial area is located generally south of Oroville between State Route 70 and Highway 99E. Water service could be provided to the area by the County or by a new water supply agency which would contract with the County for water. Labor requirements could be met from the Oroville metropolitan area.

CHAPTER III. DEMAND FOR PROJECT WATER

This chapter presents an evaluation of the water requirements, the water supplies, and the demand for supplemental water in Butte County. In computing the demand for project water it was assumed that the demand would be limited to the water required to serve the urban and residential farm use in the Oroville metropolitan area east and west of the Feather River, and to the proposed Tri-City and South Oroville industrial areas. No agricultural demand for project water, other than that shown for residential farm use in the Oroville metropolitan area, was assumed due to the relatively high cost of project water.

Industrial Water Requirements

The valley floor portion of Butte County contains excellent sites for industrial development. Some of the advantages which should prove an inducement to the development of industry in the area are; (1) excellent transportation facilities in the form of highways and railroads, (2) inexpensive land with slopes sufficient for adequate drainage, (3) available power in the form of electrical energy and natural gas, (4) a relatively mild climate, and (5) many desirable residential subdivision areas in the immediate vicinity which are in close proximity to water-associated recreation such as swimming, boating, water skiing, and fishing.

The County of Butte contracted with the State of California for delivery of project water to insure that water at a reasonable price and of an excellent quality would be available to enhance these assets, thus providing an excellent and possibly unequaled climate for industrial development.

The present industrial employment ratio for the State is about 6.0 percent. In 1960, the industrial employment ratio for the County was 3.8 percent and studies presented in Bulletin 58 predict an industrial employment ratio of 6.4 percent for Butte County by the year 2020. The industrial employment ratio of the County was assumed to reach 6.0 percent by 1990, and 55 percent of the total County industrial employment was projected in the Tri-City and South Oroville industrial areas.

Studies of industrial water use, conducted by the Department of Water Resources and reported in Bulletin No. 124, "Water Use by Manufacturing Industries in California, 1957-59", show the present weighted average industrial water use in Butte County to be about 2.2 acre-feet per year per employee. In projecting future industrial water requirements, a unit use of 2.0 acre-feet per employee per year was used. This unit water use provides a conservative estimate of the future industrial water requirements.

The project service area, for which the industrial water requirements were computed, was assumed to be comprised of the proposed Tri-City and South Oroville industrial areas.

The proposed Tri-City industrial area is located so that water can be supplied to the area by a gravity distribution system.

The water now delivered to the Oroville area by the California Water Service Company could, in the future, be made available to help meet the industrial water needs. This water, which originates from the West Branch of the Feather River, is conveyed to the Coal Canyon Powerhouse through the Miocene Canal system. The elevation at the powerhouse is sufficient to provide water to the industrial area through a gravity distribution system.

The proposed South Oroville industrial area is located so that project water could be readily delivered to the area with the construction of minimum distribution facilities.

The historical and projected industrial water requirements in the Tri-City and South Oroville industrial areas are shown in Table 4. For the purpose of this report, it was assumed that approximately 75 percent of the industrial development would occur in the proposed Tri-City industrial area and 25 percent in the proposed South Oroville industrial area.

The estimated growth of industrial employment in the service area was predicated on the assumption that the presently demonstrated agressive industrial recruitment policy of the County would be pursued in the future.

Urban Water Requirements

The amount of water required to supply the urban population, shown in Table 2, in the Oroville area on both sides of the Feather River was assumed to equal the product of the number of urban inhabitants and an assumed per capita water use. The per capita water use

TABLE 4

HISTORICAL AND PROJECTED INDUSTRIAL
WATER REQUIREMENTS FOR THE PROPOSED
TRI-CITY AND SOUTH OROVILLE INDUSTRIAL AREAS

1940-2000

	Year						
	1940	1950	1960	1970	1980	1990	200
Population of County	43,000[1/]	65,000[1/]	82,000[1/]	117,000	145,000	191,000	257,0
Percent of County population employed by industry	1.96	4.96	3.80	4.5	5.2	6.0	
Total County industrial employees	843[1/]	3,226[1/]	3,116[1/]	5,260	7,540	11,460	15,
Percent of industrial employees assumed to be in service area	0	0	0	10	35	55	
Industrial employees in service area	0	0	0	530	2,640	6,300	8,
Unit water use (acre-feet per employee per year)	2.2	2.2	2.2	2.0	2.0	2.0	
Tri-City industrial water requirement in acre-feet per year	0	0	0	800	4,000	9,000	13,0
South Oroville industrial water requirement in acre-feet per year	0	0	0	300	1,300	3,600	4,2
Total service area industrial water requirement in acre-feet per year	0	0	0	1,100	5,300	12,600	17,20

1/ U.S. Census of Population - California General Social and Economic Characteristics, 1940, 1950, 1960

was assumed to vary from 260 gallons per capita per day in 1970 to 280 gallons per capita per day by the year 2000.

It was assumed that a portion of the service area urban population would live on residential farms[1/] and irrigate small pastures and/or plots of forage crops. The water required for such irrigation will be in addition to the assumed urban per capita consumption of 260-280 gallons per day.

A summary of the projected urban water requirements and the residential farm domestic water requirements in the Oroville metropolitan area east and west of the Feather River is shown in Table 5.

Residential Farm Irrigation Requirements

It was estimated that about 5 percent of the urban population in the Oroville area east and west of the Feather River would reside on residential farms of a few acres in size, and that there would be an average of 3½ residents per farm. It was estimated that an average of approximately three acres of land would be irrigated on each of these farms for the purpose of maintaining a summer pasture or for raising forage crops. The annual water use for this irrigation was estimated to be approximately four acre-feet per acre. A summary of the projected urban residential farm irrigation requirement, based on the above estimates and assumptions, is shown in Table 6.

1/ As used in this report, a residential farm is considered to be a low density urban development of varying size of which only three acres would be irrigated.

TABLE 5

PRESENT AND PROJECTED
URBAN WATER REQUIREMENTS OROVILLE AREA

1960-2000

Year	Urban Population Oroville Area East and West of Feather River	Per Capita Requirement: Gallons per Day	Per Capita Requirement: Acre-Feet per Year	Urban Water Requirement in Acre-Feet 2/
1960	20,400	465	0.52 1/	10,600
1970	41,500	260	.291	12,100
1980	52,500	270	.303	15,900
1990	70,000	275	.308	21,500
2000	97,500	280	.314	30,600

1/ Computed value obtained by dividing total water diverted by population. Includes losses within the system.

2/ Does not include water required for irrigation on residential farms.

TABLE 6

PROJECTED WATER REQUIREMENTS
FOR IRRIGATION ON RESIDENTIAL FARMS
IN THE OROVILLE AREA
1970-2000

Year	Number of Residential Farms	Irrigated Acreage	Water Use in Acre-Feet per Acre	Water Requirement in Acre-Feet
1970	590	1,770	4.0	7,100
1980	750	2,250	4.0	9,000
1990	1,000	3,000	4.0	12,000
2000	1,390	4,170	4.0	16,700

Local Water Supplies

The Oroville and Thermalito areas are presently being served by three water supply agencies. The three agencies and the percentage of the total water each agency supplied in 1963 are (1) Thermalito Irrigation District, 22.7 percent, (2) Oroville-Wyandotte Irrigation District, 18.3 percent, and (3) California Water Service Company, 59 percent.

Almost all of the present water supplies distributed by the agencies are obtained by diversions from tributaries of the Feather River. A minor portion of the total water supply for the area is derived from ground water. This use, however, is not expected to increase appreciably in the future due to the relative high cost of development and water quality considerations. Concentrations of iron and manganese in excess of U. S. Public Health Service domestic water standards have been found in ground waters in this area.

California Water Service Company

The California Water Service Company is a private water supply utility company. The Company, as mentioned previously, obtains water from Pacific Gas and Electric Company at the tailrace of the Coal Canyon Powerhouse and conveys it via the Powers Canal to the Oroville and Thermalito area. The Company also operates three wells which produced about 200 acre-feet in 1963.

The operation and maintenance of the Powers Canal, which is unlined for a good part of its length and winds around steep hillsides, is relatively expensive. These costs tend to be fixed and are not dependent on the amount of water conveyed. It was assumed that as

project water was made available to the Oroville and Thermalito areas, use of the Powers Canal would be discontinued. The water available at Coal Canyon Powerhouse to the California Water Service Company would instead be available to help meet the industrial water requirements in the Tri-City area. The amount of water assumed to be available to this industrial area from the tailrace of Coal Canyon Powerhouse is given below.

Year	Acre-Feet
1970	7,000
1980	8,000
1990	9,000
2000	10,000

Oroville-Wyandotte Irrigation District

The Oroville-Wyandotte Irrigation District has recently completed its South Fork Project on the South Fork of the Feather River and presently supplies both irrigation and urban water to the area east and south of Oroville. The District project is expected to make available sufficient water to meet the future irrigation needs of the area east and south of Oroville extending beyond Palermo and to provide for all urban water requirements within the District's boundaries.

The urban population within the District's boundary is included in the figures shown for the projected population in the Oroville urban area east of the Feather River.

In 1963, the District supplied about 1,740 acre-feet of the urban requirements in the Oroville area. The tabulation below shows the contribution the District is expected to make towards meeting the urban needs of the area in the future.

Year	Amount Acre-Feet
1963	1,740
1970	3,300
1980	4,400
1990	5,900
2000	7,900

It was assumed that the District would not supply any significant amount of water for urban use outside its boundary. This assumption was based on the comparative cost of project water versus the cost of District water cited in a report prepared by the Bechtel Corporation for the District entitled "Engineering and Economic Feasibility Report on the South Fork Project", December 1964.

Thermalito Irrigation District

The Thermalito Irrigation District presently serves the area in and around the community of Thermalito. In the past this area was predominantly a residential farm community. The present development trend, however, is towards the establishment of an urban area.

The Thermalito Irrigation District presently obtains its entire water supply from the California Water Service Company via the Company's Powers Canal.

The District and Table Mountain Irrigation District jointly own licenses 737 and 855 to store 8,200 acre-feet of water annually in Wilenor Reservoir located on Concow Creek, a tributary of the West Branch Feather River. The District's share under these licenses is 45 percent or 3,700 acre-feet per year. Historically, the District has not been able to fully utilize this water due to the capacity limitations of Pacific Gas and Electric Company's conveyance system upstream of Coal Canyon Powerhouse.

The Department of Water Resources has contracted with the Thermalito Irrigation District to pass the District's share of Lake Wilenor water through Oroville Reservoir. The contract permits the District to divert a maximum of 3,700 acre-feet annually from the Thermalito Power Canal.

Total Local Water Supplies

Table 7 presents a tabulation of present and predicted future local urban water supplies available in the Oroville and Thermalito areas.

TABLE 7

ESTIMATED LOCAL WATER SUPPLIES BY
SOURCE AND AGENCY AVAILABLE TO THE OROVILLE
URBAN AND INDUSTRIAL AREA
1963-2000
(acre-feet)

Year	South Fork Feather River (OWID)	West Branch Feather River (TID)	West Branch Feather River (CWSCo)	Total
1963	1,740	2,160	5,600	9,500
1970	3,300	2,700	7,000	13,000
1980	4,400	3,700	8,000	16,100
1990	5,900	3,700	9,000	18,600
2000	7,900	3,700	10,000	21,600

Demand for Project Water

A summary showing the total projected water requirements, water available from local supplies, and the supplemental water requirements assumed to equal demand for project water is presented in Table 8.

TABLE 8

SUPPLEMENTAL WATER REQUIREMENTS
1970-2000
(acre-feet)

Year	Water Requirements				Local Supplies	Supplemental Water Requirements
	Industrial	Urban	Residential Farm	Total		
1970	1,100	12,100	7,100	20,300	13,000	7,300
1980	5,300	15,900	9,000	30,200	16,100	14,100
1990	12,600	21,500	12,000	46,100	18,600	27,500
2000	17,200	30,600	16,700	64,500	21,600	42,900

The maximum annual entitlement to project water is 27,500 acre-feet. The buildup in the supplemental water requirements to meet the projected demand, shown in Table 8, differs from the annual entitlements shown in Table A of the contract with the County. This difference is due to the availability of more detailed data concerning requirements for supplemental water.

Article 7(a) of the contract provides that the County may, at any time or times during the term of the contract, request that their annual entitlement be increased or decreased. The Article provides for a decrease in the annual entitlement, or an increase in the annual entitlement up to the amount of the maximum annual entitlement shown in the contract.

The California Water Service Company has executed an agreement with the County of Butte to purchase from the County certain

specified annual quantities of water with initial delivery in 1968. Annual quantities will increase to a maximum of 3,500 acre-feet in 1990.

The Thermalito Irrigation District has expressed interest in obtaining a supplemental supply of project water from Butte County. Deliveries would start about 1975 and build up to a maximum annual delivery of 4,000 acre-feet by 1990.

CHAPTER IV. COST OF WATER SERVICE FROM THE STATE WATER PROJECT

Under the provisions of its water supply contract, Butte County is obligated to make an annual payment to the State based upon the annual entitlement for that year. This payment is designated as the Delta Water Charge.

Under the standard contract for water service, each contracting agency undertakes an obligation to repay the State for its proportionate share of costs associated with water deliveries from the State facilities. This obligation includes a share of the costs incurred by the State for the construction of transportation facilities, a proportionate share of the operation and maintenance costs of those facilities, and the Delta Water Charge. In the case of Butte County, only the Delta Water Charge is applicable since there are no transportation facilities involved. The Delta Water Charge, together with the total revenues derived during the project repayment period from the sale or other disposal of electric energy generated in connection with operation of project conservation facilities, returns to the State during the project repayment period all costs of the project conservation facilities. These include capital investment, operation, maintenance, power, and replacement costs which are allocated to the purpose of water conservation.

The Delta Water Charge paid by each contracting agency is determined by applying the Delta Water Rate to the agency's annual entitlement to project water as shown on Table A of the contract.

The Delta Water Rate is fixed by the contract at $3.50 per acre-foot through 1969 and is estimated to be $7.49 per acre-foot for the remainder of the project repayment period. In the event of

the construction of supplemental conservation facilities to supply water to the contractors in addition to the estimated project yield of 4,230,000 acre-feet a year, the Delta Water Rate will be re-calculated to take into account the cost of these supplemental facilities.

The annual entitlement to project water shown in Table A of the contract, was used to compute the total annual payment for service from the State Water Project, shown in Table 9. The total annual payment which varies from $1,050 in 1968 to $205,975 in 1990 was determined by applying the Delta Water Rate to the annual entitlements. If, however, the annual entitlement was assumed to equal the supplemental water requirement shown in Table 8, the total annual payment for service of water would increase correspondingly.

Any costs incurred by the County for conveyance and distribution facilities constructed by the County would be in addition to the Delta Water Charge.

TABLE 9

COST OF WATER SERVICE FROM
THE STATE WATER PROJECT
1968-1990

Year	Annual Entitlement (acre-feet)	Delta Water Charge	
		Unit Rate ($ per acre-foot)	Total Annual Charge
1968	300	3.50	$ 1,050
1970	400	7.49	2,996
1980	4,000	7.49	29,960
1990	27,500	7.49	205,975

Separate delivery structures will be constructed by the State concurrently with the construction of the Thermalito Power Canal to supply the California Water Service Company and the Thermalito Irrigation District. The California Water Service Company's turnout will be constructed by the State for Butte County who, in turn, will bill the Company. The Thermalito Irrigation District's turnout construction costs will be assumed by the District under terms of its contract with the State to convey Lake Wilenor water through Oroville Reservoir.

CHAPTER V. FINANCIAL CAPABILITY

Among the most important and basic elements to consider relative to the execution of a water supply contract between the State and the County of Butte is the financial capability of the County to pay the costs of obtaining a water supply from the State.

The test of financial capability is that the public credit of the agency contracting with the State be sufficient to support and repay the fixed annual obligations which it will incur by contracting for project water. These debts include both the annual Delta Water Charge payable for water and any costs incurred for conveyance and distribution of the water.

It was assumed that the County, acting as a political entity, would not be involved in retailing the water to the consumers, but would act as a wholesaling agency only. Local distribution facilities would be built and operated by existing or new water supply districts or companies.

The following sections present an evaluation of the historical and projected financial position of Butte County. Included in Appendix A of this report is a credit analysis of the County to show the present financial position of the County.

Present and Projected Assessed Valuations

The assessed valuation of property in Butte County has increased substantially during the past decade. At the start of fiscal year 1954-55 the assessed valuation was about $95 million. By 1963-64 this value had increased to about $187 million and represented a market value of about $925 million. Assessed valuation has increased

at a relatively constant rate during the last ten years except for two abnormally high years and one subnormal year. The historical assessed valuations, both per capita and total, are shown in Table 10.

TABLE 10

HISTORICAL ASSESSED VALUATIONS
1954-1963

Fiscal Year	Assessed Valuation	
	Per Capita	Total
1954-55	$1,382	$ 95,135,000
1955-56	1,358	96,600,000
1956-57	1,578	117,156,000
1957-58	1,579	121,973,000
1958-59	1,648	130,886,000
1959-60	1,878	151,994,000
1960-61	1,893	157,530,000
1961-62	1,913	168,526,000
1962-63	1,957	175,404,000
1963-64	2,042	186,862,000

Assessed valuation of property in the County will undoubtedly continue to increase in the future along with population and economic development. It was necessary to make projections of assessed valuations to analyze the ability to pay for water service. These projections, to be conservative, were based on the assumption that the assessed valuation per capita would remain approximately at its present level. Projected assessed valuations are shown in Table 11.

TABLE 11

PRESENT AND PROJECTED ASSESSED VALUATIONS
1963-1990

Year	Population	Assessed Valuation	
		Per Capita	Total
1963-64	91,500	$2,042	$186,862,000
1970	117,000	2,000	234,000,000
1980	145,000	2,000	290,000,000
1990	191,000	2,000	382,000,000

Historical and Projected Bonded Indebtedness

As of June 30, 1963, the County of Butte, as a political entity, had no bonded debt. However, within the County, irrigation, school, and special districts carried a bonded debt of $13,618,820. School bonds represent the greatest portion of this debt, comprising about 48 percent of the total. Bonded debt carried by cities and irrigation districts was about 24 and 16 percent respectively. The Oroville-Wyandotte Irrigation District has a $62 million revenue bond issue outstanding in connection with its South Fork Feather River hydroelectric and water supply project. The historical bonded indebtedness for various entities in the County is shown in Table 12.

TABLE 12

HISTORICAL BONDED INDEBTEDNESS
1958-1962

	Bonded Debt by Entity, Thousands of Dollars				
	1958-59	1959-60	1960-61	1961-62	1962-63
Districts					
Special	*	*	242.5	234.5	462.1
Elementary School	2,662.7	2,720.1	2,575.8	2,910.5	2,890.7
High School	3,850.0	3,606.5	3,651.0	3,882.0	3,628.0
Unified School	340.0	314.0	1,349.0	1,285.0	1,219.0
Irrigation 1/	2,829.0	2,716.5	2,582.0	2,515.5	2,149.0
Cities	379.3	1,294.7	2,372.0	2,352.0	3,179.0
TOTAL	10,061.0	10,651.8	12,772.3	13,179.5	13,527.8
Debt as a percent of assessed valuation	7.0%	7.0%	7.4%	7.8%	7.8%

* Data are not available for non-revenue connected bonded debt.

1/ Calendar year basis.

Although it is difficult to predict the extent to which the County or the political units within the County will incur bonded inbebtedness in the future, it was assumed that the relationship between bonded debt and assessed valuation would remain about the same as it is at present. Table 13 shows the estimated future bonded indebtedness.

TABLE 13

PRESENT AND PROJECTED BONDED INDEBTEDNESS
1962-1990

Year	Assessed Valuation	Debt as a Percent of Assessed Valuation	Bonded Indebtedness
1962-63	$175,404,000	7.8%	13,527,870
1970	234,000,000	8.0	18,720,000
1980	290,000,000	8.0	23,200,000
1990	382,000,000	8.0	30,560,000

Financing Future Obligations

The determination of financial capability requires an analysis of several interrelated factors, including the costs of obtaining a water supply from the State, the probable payment schedule, the present and future assessed valuation of the County, its current and future debt for public works, the tax rates prevalent in the area, and the additional tax rates that will be incurred in undertaking the contract for project water.

An investigation was made of the present financial condition of Butte County and the data gathered in this investigation are presented in detail in the appendix to this report. The data in the appendix do not attempt to measure the impact of proposed costs of a water supply on the County, but may be used to obtain a picture of historical and current financial conditions within the County.

Comparison with Assessed Valuations

At the start of fiscal year 1963-64, the percentage of bonded indebtedness to assessed valuation in Butte County was

7.8 percent. This is well below the accepted maximum commonly used to indicate the favorable financial capability of a governmental agency.

Levels of Ad Valorem Taxation

Property tax rates in Butte County vary considerably depending on the location of the property. The average tax rate, County wide, during the 1963-64 fiscal year was about $7.50 per $100 assessed valuation.

Tax rates in Butte County have tended to increase in the past several years; in line with the trend in most areas of Northern California. Table 14 indicates the weighted average tax rates and their component parts in the County for the past eight years.

TABLE 14

WEIGHTED AVERAGE
AD VALOREM TAX RATE COMPONENTS
1956-1964
(dollars per $100 assessed valuation)

Year	City Rate[1/]	County Rate[2/]	School Districts[3/]	Other Districts[4/]	Total Rate[5/]
1956-57	$2.33	$2.36	$2.35	$0.53	$5.64
1957-58	2.11	2.61	2.51	0.57	6.02
1958-59	1.98	2.76	2.49	0.59	6.15
1959-60	2.27	2.52	2.57	0.62	6.06
1960-61	2.54	2.80	2.99	0.66	6.85
1961-62	2.54	2.90	3.23	0.67	7.20
1962-63	2.71	2.98	3.38	0.66	7.48
1963-64	2.68	2.68	3.40	0.72	7.50

1/ City levies divided by assessed value of incorporated municipalities.
2/ County levies divided by assessed value of county.
3/ School District levies divided by assessed values of county.
4/ Other district levies divided by assessed value of areas outside incorporated municipalities.
5/ Total levies divided by assessed value of county.

The total annual Delta Water Charge shown in Table 15 below was determined by applying the Delta Water Rate to the annual entitlement to project water shown in Table A of the contract. If the annual entitlement were to exceed the supplemental water requirement shown in Table 9, the Delta Water Charge shown in Table 15 would increase accordingly.

The financial capability of the County to pay the total annual Delta Water Charge can be analyzed by computing the necessary ad valorem tax which would apply to the projected assessed valuation.

TABLE 15

AD VALOREM TAX RATE NECESSARY
TO MEET THE DELTA WATER CHARGE
1970-1990

Year	Total Annual Delta Water Charge	Projected Assessed Valuation	Tax Rate ($/$100)
1970	$ 2,996	$234,000,000	0.008
1980	29,960	290,000,000	0.010
1990	205,975	382,000,000	0.054

Table 15 indicates that an ad valorem tax levied for the purpose of paying the Delta Water Charge would not cause a serious increase in the tax rate. However, local water agencies may elect to pay the Delta Water Charge by a water toll or other means. The above computation of ad valorem tax rates is for comparative purposes only and should not be construed as the method of payment.

CHAPTER VI. CONCLUSIONS

Analysis of the data gathered and presented in this report has led to the following conclusions:

1. The County of Butte has the legal authority to enter into contracts with the State for the purchase of water supplies from the State Water Project.

2. The valley floor portion of Butte County has the potential for substantial population and economic growth. External population pressures indicate a high probability of increase in population and employment if sufficient water supplies are available in the future.

3. The local water supplies available in the Oroville-Thermalito area are not sufficient to satisfy the future requirements of the area. The area's future growth will be restricted unless supplemental water is made available.

4. There will be an economic demand for water from the State water facilities of about 27,500 acre-feet per year by the year 1990.

5. The financial position of Butte County is such that the increased fixed annual obligations and taxation necessary to pay for project water would not be an undue burden on the County in case of default in payments by the water users.

6. The County of Butte has a need for water from the State Water Project and it has the legal ability and the financial capability required to enter into a contract with the State of California for this water.

APPENDIX A

CREDIT ANALYSIS OF THE

COUNTY OF BUTTE

CREDIT ANALYSIS OF BUTTE COUNTY

PREPARED AS OF JUNE 30, 1963

A. Statement of Debt of Butte County:

1. Net Direct Debt

None

2. Special Obligations (not full faith and credit)

None

3. Limitations on Debt

Maximum indebtedness shall not at any time exceed 5 percent of taxable property in the County as shown by the last equalized assessment roll. If bonds are for projects for water conservation, flood control, irrigation, reclamation, drainage works, improvements; or other purposes are included in any propositions submitted, the total amount of bonded indebtedness may exceed 5 percent but shall not exceed 15 percent of the taxable property of the County as shown by the last equalized assessment roll. Limitation does not apply to bonds for refunding purposes existing prior to January 1, 1880. Senate Bill 1451, Chapter 1518, of 1963 regular statutes also allows a maximum up to 15 percent of the taxable property of the County as shown by the last equalized assessment roll if the bonds are to be used for primary road construction purposes.

4. Amount of Bonds Authorized but Unissued

None

5. Utilities Operated by the County

Sterling City Sewer Maintenance District

B. Debt of Overlapping, Coterminous, and Subsidiary Political Units:

Unit	Bonded Indebtedness in Butte County 1/
Nonrevenue Connected Debt	
Cities	$ 3,179,007
Elementary Schools	2,890,700
High Schools	3,628,000
Unified School Districts	1,219,000
Irrigation Districts	2,149,000
Improvement Districts	227,776
Other	234,387
Total	$13,527,870
Revenue Connected Debt	
Irrigation Districts	$62,347,200

1/ As of June 30, 1963

C. Default Record

None

D. Assessed Valuation of Property in Butte County:

1.

	1959-60	1960-61	1961-62	1962-63	1963-64
Real Property	$127,973,830	$131,928,450	$140,078,915	$146,059,395	$156,288,130
Personal Property	29,769,670	31,546,210	34,586,792	35,692,090	36,989,575
Subtotal	$157,743,350	$163,474,660	$174,665,767	$181,751,485	$193,277,705
Less Exemptions	5,749,340	5,944,545	6,139,950	6,347,100	6,415,780
Net Assessed Valuations	$151,994,160	$157,530,115	$168,525,757	$175,404,385	$186,861,925
Assessment Ratio	21.0%	20.4%	19.5%	19.8%	20.2%
Estimated Market Value 1/	$723,781,714	$772,206,446	$859,825,291	$885,880,732	$925,059,034

1/ Assessment ratio for utilities assumed to be 40 percent.

2. Assessment Ratio (Proportion of Market Value) 1963, Per State Board of Equalization

a. Real Property 20.2%
b. Personal Property 20.2%

3. Major Tax Exempt Property within County

Chico State College
United States Forest Reserve
Grey Lodge Waterfowl Management Area
Oroville-Wyandotte Irrigation District (South Fork Project)

4. Concentration of Valuable Property just Outside the County

No major concentration

5. Largest Taxpayers in the County

Pacific Gas & Electric Company
Pacific Telephone & Telegraph Company
Western Pacific Railroad Company
Southern Pacific Railroad Company
California Water Service Company
Diamond National Corporation
Parrott Investment Company
Georgia Pacific Corporation
Olive Products Company
Standard Oil Company

The above interests account for approximately 30 percent of the total County taxes, of which approximately 68 percent is paid by Pacific Gas & Electric Company.

E. Property Tax Rates in Butte County:

1. WEIGHTED AVERAGE AD VALOREM TAX RATE COMPONENTS
1956-1964
(dollars per $100 assessed valuation)

Year	City Rate[1]	County Rate[2]	School Districts[3]	Other Districts[4]	Total Rate[5]
1956-57	$2.33	$2.36	$2.35	$0.53	$5.64
1957-58	2.11	2.61	2.51	0.57	6.02
1958-59	1.98	2.76	2.49	0.59	6.15
1959-60	2.27	2.52	2.57	0.62	6.06
1960-61	2.54	2.80	2.99	0.66	6.85
1961-62	2.54	2.90	3.23	0.67	7.20
1962-63	2.71	2.98	3.38	0.66	7.48
1963-64	2.68	2.68	3.40	0.72	7.50

1/ City levies divided by assessed value of incorporated municipalities.
2/ County levies divided by assessed value of County.
3/ School District levies divided by assessed values of County.
4/ Other District levies divided by assessed value of areas outside incorporated municipalities.
5/ Total levies divided by assessed value of County.

2. Assessment Roll

Taxes for all districts are levied from same assessment roll (see E on preceding page).

3. Legal Limits on Tax Rates (In Dollars per $100 of Assessed Valuation

a. General County	None
b. Library	$ .30
c. Mosquito Abatement Districts (Board can raise to .40)	.15
d. Recreation Districts	.50
e. Cemetery Districts	.20
f. Drainage Districts	None
g. Sanitary Districts	.60
h. Fire Protection Districts	None
i. Reclamation Districts (Board may raise)	.75
j. Sewer Maintenance Districts	None
k. Public Utility Districts	None
l. School Districts (may be increased by referendum)	
Elementary - separate	.80
Elementary - with kindergarten	.90
High School - separate	.75
Unified	1.55
Unified - with kindergarten	1.65

4. Taxes by Classification of Property

Tax rates apply to all classes of property with the following exceptions:

Drainage district tax is on land only except that districts which have bonds outstanding are on land and improvements. Maintenance area, reclamation district, and sewer maintenance district taxes are on land and improvements. Tax exemption does not apply to improvement or assessment districts such as drainage, sanitary, reclamation, and public utility districts.

F. Tax Collection:

1. Tax Collection Record

Fiscal Year	Amount Levied	Cash Collections in Year of Levy		Uncollected at End of Fiscal Year	
		Amount	Percent	Amount	Percent
1963-64	$12,406,064.92	$12,161,770.46	98.0	$244,294.46	2.0
1962-63	12,237,525.14	12,042,361.02	98.4	191,164.12	1.6
1961-62	11,280,975.14	11,159,349.94	98.9	121,625.21	1.1
1960-61	10,094,019.11	9,966,910.55	98.7	127,108.56	1.3
1959-60	8,662,562.36	8,584,981.37	99.1	77,580.99	0.9
1958-59	8,346,464.20	8,273,491.76	99.1	72,972.44	0.9
1957-58	7,204,172.78	7,147,400.47	99.2	56,772.31	0.8

2. When Taxes Due

a. Due Date - One-half of tax levy due each on November 1 and February 1.

b. When Delinquent - December 10 and April 10 following the due date.

c. Penalties - Penalties of 6 percent attach as of the delinquent dates. Costs of $3.00 attach to each assessment unpaid as of April 10.

3. Sales of Tax Deeded Property at Public Auction are Held Regularly

4. Estimated Tax Delinquency

a. A delinquency factor of 5 percent is used in computing general county tax rates.

b. A delinquency factor of 10 percent is used in computing all school tax rates.

c. Delinquency factors ranging from 1 percent to 15 percent are used in computing special district tax rates.

5. Collection of Taxes

The County Tax Collector collects taxes for all rates adopted by the Board of Supervisors. In addition, the County Tax Collector may collect the taxes for cities and some special districts such as reclamation and sanitation if these districts desire to use the same assessed valuation or procedures as established by the Auditor's Office and approved by the Board of Supervisors.

G. Sinking Fund Operations:

None

H. Future Debt Service Requirement:

1. Fiscal Policies

The fiscal policies of the County agree with standard procedure.

2. General Character and Efficiency of the Management

The general character and efficiency of the administration of the County is consistent with sound business practices.

3. Services Performed by the Agency

The County performs all services necessary on a County-wide basis.

I. Economic Background:

1. Land Area

Butte County contains 1,072,300 acres.

2. Population Data

Year	Urban	Rural Farm	Rural Nonfarm	Total Population
1930	11,700	9,100	13,300	34,100
1940	13,700	10,500	18,700	42,900
1950	27,200	9,400	28,300	64,930
1960	41,000	8,200	32,800	82,030

3. Employment Data

	1940		1950		1960	
	No.	%	No.	%	No.	%
Extractive Industries	3,816	29.6	3,841	18.0	3,332	12.5
Agriculture	3,052	23.7	3,582	16.8	3,083	11.6
Forestry and Fisheries	40	0.3	83	0.4	127	0.5
Mining	724	5.6	176	0.8	122	0.5
Manufacturing Products	1,599	12.4	3,226	15.1	3,115	11.7
Lumber and Wood	964	7.5	1,761	8.2	1,409	5.3
Food and Kindred	370	2.9	557	2.6	574	2.2
Other Manufacturing	265	2.0	908	4.3	1,132	4.3
All Other	7,481	58.0	14,299	66.9	20,119	76.3
Total	12,896	100.0	21,366	100.0	26,566	100.0

4. Agricultural Income (Gross Payment Receipts)

	Five Year Summary of Crop Values				
Commodities	1958	1959	1960	1961	1962
Field Crops	$26,049,450	$20,216,740	$20,384,150	$21,659,200	$22,797,100
Seed Crops	419,200	1,241,349	964,330	1,264,430	1,235,580
Vegetable Crops	969,150	1,167,522	892,950	1,348,180	1,703,300
Fruit & Nut Crops	7,692,800	15,518,700	10,559,300	14,098,940	13,093,080
Nursery Stock	200,800	196,448	226,800	290,800	307,400
Livestock & Poultry	14,535,300	8,843,315	9,045,900	9,223,660	9,142,620
Miscellaneous	129,500	127,437	107,600	187,900	201,200
Government Payments 1/	426,840	403,682	326,000	441,000	688,000
Totals	$50,423,040	$47,715,313	$42,547,030	$48,514,110	$49,167,280

1/ Agricultural Stabilization and Conservation Service, USDA

5. Industry

Although predominantly agricultural, Butte County is growing industrially. Already a number of industrial plants are operating here, and there are attractive opportunities for more.

The most important industrial activity in the County is the manufacture of wood products. Sixty-five plants are now so engaged. The second most important industry in the County is food processing. Foods processed include olives (21 plants), almonds, nuts, and other fruits, meats, and wine. Four plants manufacture stone and clay items. Four plants manufacture machinery.

a. Principal Products

1. Forest products
2. Food processing
3. Minerals
4. Petroleum products

b. Large Industrial Concerns

1. Pacific Gas and Electric Hydroelectric Plants
2. Diamond National Corporation
3. Libby McNeil and Libby Company

6. Transportation

Transportation facilities include the main and branch lines of both the Sourthern Pacific and the Western Pacific Railroads, a number of local and long distance truck and express lines, and the Pacific Airlines. Several main highways cross the County and all sections are served by good secondary roads totalling 1,835 miles.

7. Natural Resources

The natural resources of the County include 3.8 billion board-feet of standing timber, natural gas, and sand and gravel, crystalline limestone, lead, zinc, copper, and cadium.

J. Financial Data:

1. General Data

a. Population

1950	64,930
1960	82,030
1963 (est)	95,000

b. Assessed Valuations

1. Amount 1963-64	$186,861,925
2. Basis of Assessment	20.2%
3. Estimated market value	925,059,034

c. Bonded Debt

June 30, 1963 $75,875,020

2. Per Capita Data

a. Assessed valuations	$2,042
b. Estimated full valuation	9,760
c. Bonded debt	818
d. Tax collection	134

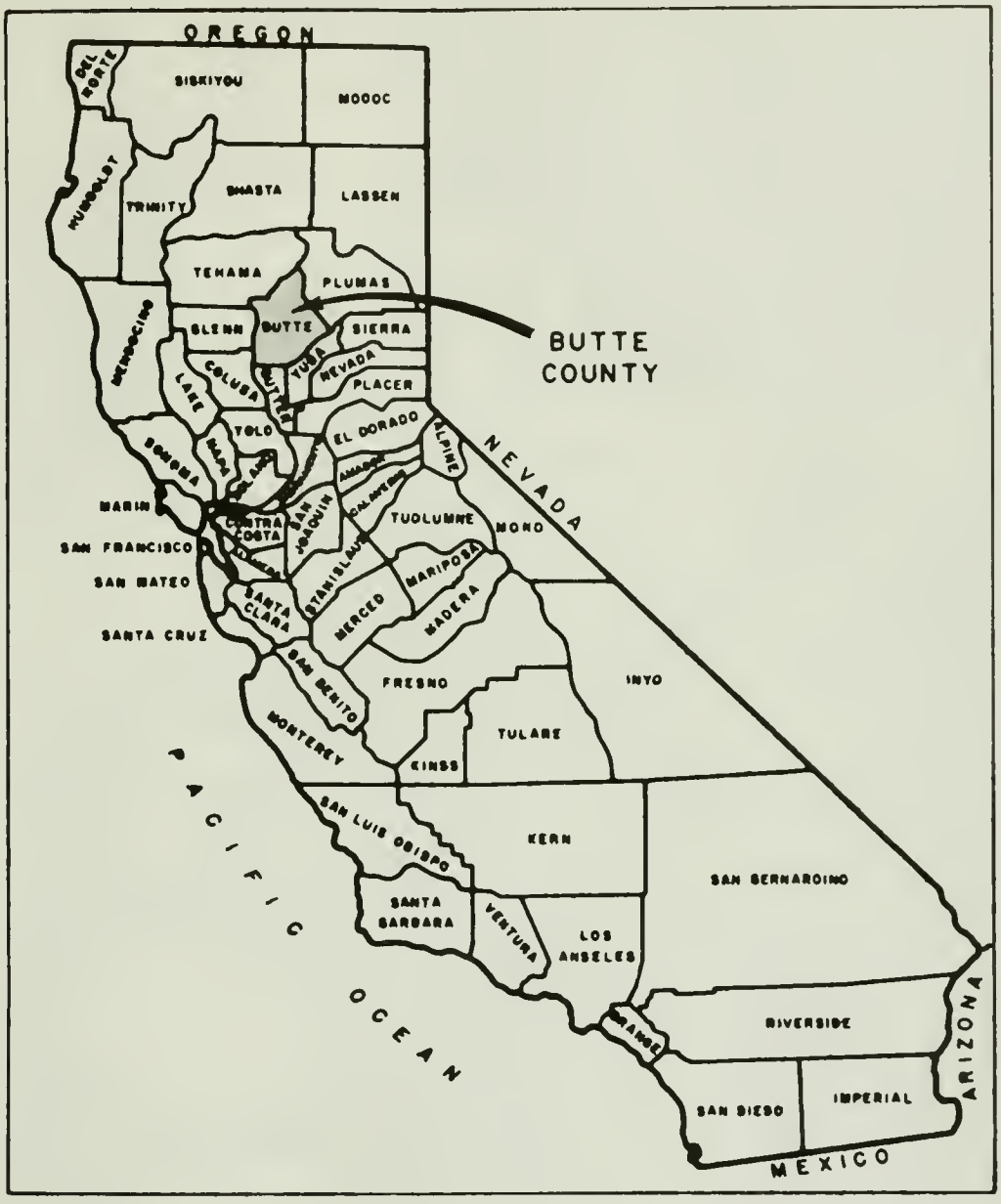
3. Ratios

a. Tax supported bonded debt as a % of:

1. Assessed valuation	7.4%
2. Estimated full valuation	1.5%
3. Tax collections	98.4%

b. Percentage increase

1. Population (1950-1960)	26.4%
2. Assessed valuations (10 year average)	7.8%
3. Bonded debt(1960-1964)	28.0%
4. Tax levies (1958-1963)	70.0%



PROPOSED INDUSTRIAL SITE

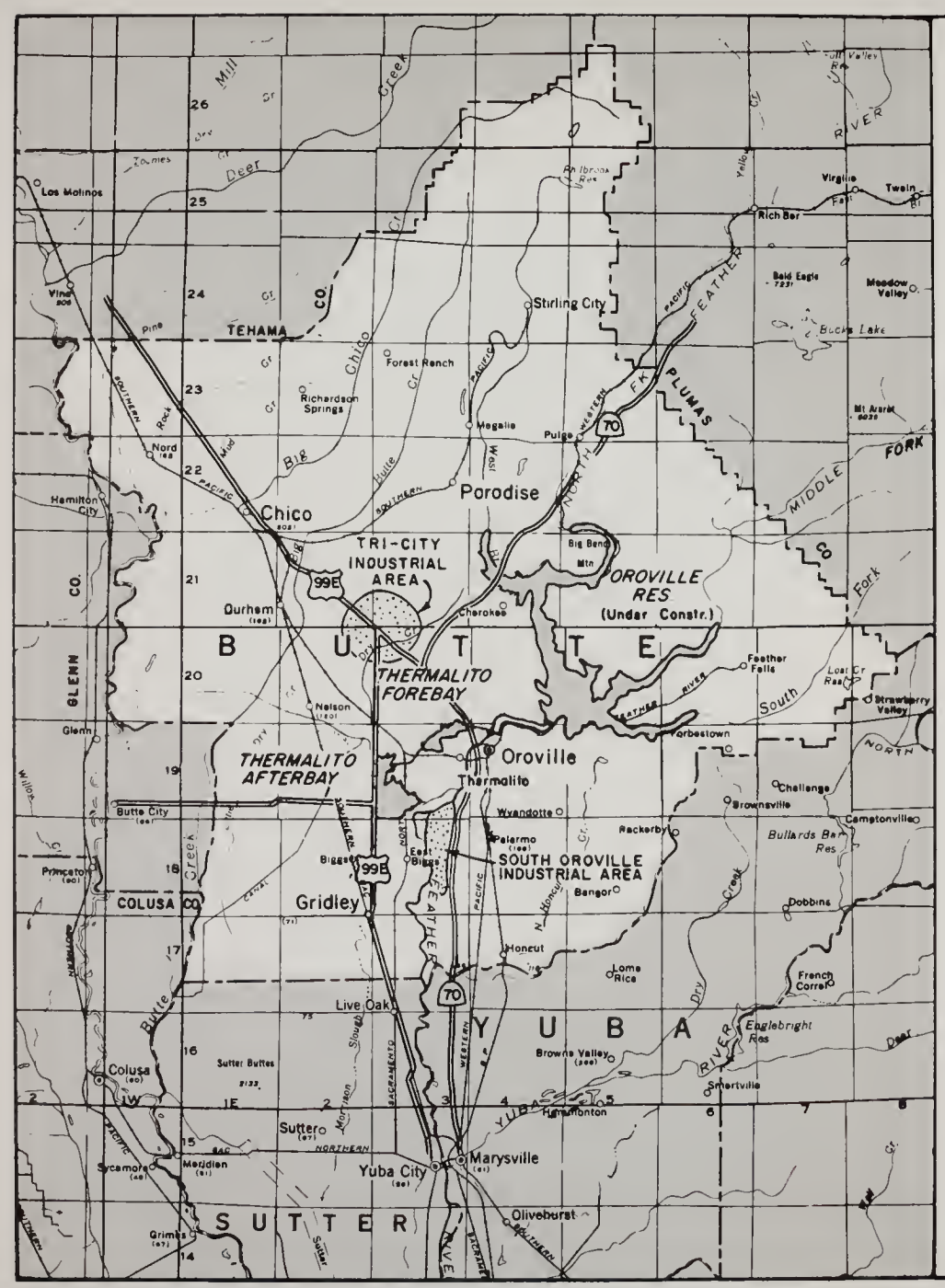
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SACRAMENTO DISTRICT

FEASIBILITY OF SERVING BUTTE COUNTY FROM THE STATE WATER PROJECT

LOCATION MAP
1965

SCALE OF MILES
0 6 12

PLATE 1



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